CLAIMS

We claim:

1. A method for determining bug ownership, comprising:

generating a database that contains database tokens that relate to identified bugs and that are associated with potential owners;

generating input tokens associated with a bug in question;

scanning the database for occurrences of the input tokens; and

determining an overall probability of ownership of the bug in question for potential owners in the database.

2. The method of claim 1, wherein generating a database comprises generating a derivative database from a bug database that contains bug records with which potential owners are associated.

3. The method of claim 2, wherein generating a derivative database comprises generating database tokens from character strings of the bug records.

4. The method of claim 3, wherein generating database tokens comprises generating tokens for character strings that comprise at least one of letters, numbers, and underscores.

5. The method of claim 3, wherein generating database tokens further comprises noting the number of times each input token occurs relative to each potential owner of the bug in question.

6. The method of claim 1, wherein generating input tokens comprises generating tokens from character strings of a bug input.

7. The method of claim 1, wherein generating input tokens comprises generating tokens for character strings that comprise at least one of letters, numbers, and underscores.

8. The method of claim 1, wherein scanning the database comprises scanning the database tokens to identify matches for the input tokens.

9. The method of claim 1, wherein scanning the database further comprises identifying the number of occurrences of each input token in the database relative to each potential owner of the bug in question.

10. The method of claim 1, wherein determining the overall probability of ownership comprises summing the total number of occurrences of each input token in the database and normalizing the total number of occurrences of each input token as to each potential owner of the bug in question.

11. The method of claim 10, wherein determining the overall probability of ownership further comprises scaling normalized values that result from the normalizing to obtain scaled probabilities as to each input token relative to each potential owner in the database.

12. The method of claim 11, wherein determining the overall probability of ownership further comprises determining the standard deviance for each scaled probability and removing owner tokens from consideration that are associated with an input token having a deviance below a predetermined minimum deviance.

13. The method of claim 12, wherein determining the overall probability of ownership further comprises determining the overall probability of ownership as to all potential owners using the scaled probabilities associated with those owners.

14. The method of claim 13, wherein determining the overall probability of ownership as to all potential owners comprises applying Bayes' Theorem to the scaled probabilities of the potential owners to calculate the overall probability for each potential owner of owning the bug in question.

15. A system for determining bug ownership, comprising:

means for generating input tokens associated with a bug in question;

means for scanning a database that associates potential owners with database tokens pertaining to bugs that the owners may own for occurrences of the input tokens; and

means for determining an overall probability of ownership of the bug in question for potential owners of the database.

16. The system of claim 15, wherein the means for generating input tokens comprise means for generating tokens from character strings of an input entered by a user.

17. The system of claim 15, wherein the means for scanning a database comprise means for scanning the database tokens to identify matches for the input tokens and means for identifying the number of occurrences of the input tokens in the database relative to each potential owner.

18. The system of claim 15, wherein the means for determining the overall probability of ownership comprise means for determining a probability of ownership as to each potential owner relative to each database token associated with those owners.

19. The system of claim 18, wherein the means for determining the overall probability of ownership further comprise means for determining the overall probability of ownership as to the potential owners using the determined probabilities as to each input token.

20. The system of claim 19, wherein the means for determining the overall probability of ownership as to the potential owners using the determined probabilities comprise means for applying Bayes' Theorem to those probabilities to calculate the overall probability for each potential owner of owning the bug in question.

21. The system of claim 15, further comprising means for generating the database from bug records contained in a bug database.

22. A system stored on a computer-readable medium, the system comprising:

logic configured to generate a database that associates potential owners with database tokens that pertain to bug records;

logic configured to generate input tokens from an input that describes a bug in question;

logic configured to identify the number of occurrences of each of the input tokens in the database as per each potential owner; and

logic configured to determine an overall probability of ownership of the bug in question for the potential owners relative to the number of occurrences.

23. The system of claim 22, wherein the logic configured to generate a database is configured to generate database tokens from character strings of bug records of a bug database and note the number of occurrences of each database token relative to each potential owner.

24. The system of claim 22, wherein the logic configured to generate input tokens is configured to generate tokens from character strings of an input file.

25. The system of claim 22, wherein the logic configured to determine the overall probability of ownership is configured to determine probabilities of ownership as to each potential owner relative to database tokens associated with those owners.

26. The system of claim 25, wherein the logic configured to determine the overall probability of ownership is further configured to determine the overall probability of ownership as to the potential owners using the determined probabilities.

27. The system of claim 22, wherein the logic configured to determine the overall probability of ownership is further configured to apply Bayes' Theorem to the determined probabilities to calculate the overall probability for each potential owner of owning the bug in question.

28. A bug ownership system stored on a computer-readable medium, the system comprising:

a derivative database generator that is configured to generate a derivative database that contains a plurality of database tokens that are associated with potential owners; and

an ownership calculator that is configured to:

generate input tokens from an input that describes a bug in question,

determine the number of occurrences of the input tokens in the derivative database relative to each potential owner,

determine the probability of ownership of the bug in question for each potential owner relative to each input token, and

calculate an overall probability of ownership of the bug in question for each potential owner using the determined probabilities.

29. The system of claim 28, wherein the derivative database generator is configured to generate database tokens from character strings contained in bug records of a bug database.

30. The system of claim 28, wherein the ownership calculator is configured to calculate the overall probability by applying Bayes' Theorem to the determined probabilities.

31. A computer system, comprising:

a processing device; and

a memory that comprises a bug ownership system, the bug ownership system being configured to generate a first set of tokens for each of several potential owners, generate input tokens from an input that describes a bug in question, determine the number of occurrences of the input tokens in the first sets of tokens, determine the probability of ownership of the bug in question for each potential owner relative to each input token, and calculate an overall probability of ownership of the bug in question for each potential owner using the determined probabilities.

32. The system of claim 31, wherein the bug ownership system is configured to calculate the overall probability by applying Bayes' Theorem to the determined probabilities.